**Amendments to the Claims**:

A clean version of the entire set of pending claims, including amendments to the claims, is submitted herewith per 37 CFR 1.121(c)(3). This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims**:

1. (Previously Presented) A micro-mechanical thermal structure, comprising:

two layers of material with different thermal expansion coefficients in a first direction and a second direction respectively, the first direction being transverse to the second direction and the two layers comprising an oriented polymer, wherein the director of the molecules of the oriented polymer of the first layer is transverse to the director of the molecules of the oriented polymer of the second layer.

2. (Original) A micro-mechanical thermal structure as claimed in claim 1 wherein the oriented polymer comprises a liquid crystalline polymeric material.

3. (Original) A micro-mechanical thermal structure as claimed in claim 1 wherein the two layers constitute a single layer wherein the director of the liquid crystalline molecules on one side of the single layer is rotated with respect to the director of the liquid crystalline molecules on the opposite side of the single layer.

4. (Original) A micro-mechanical thermal structure as claimed in claim 3, wherein the liquid crystalline molecules are splay oriented with the director at one side of the single layer being oriented parallel to the single layer and the director at the other side of the single layer being oriented perpendicular to the single layer.

5. (Original) A micro-mechanical thermal structure as claimed in claim 1 wherein the director of the liquid crystalline molecules is parallel to the layers.

6. (Currently Amended) ~~Thermo-optical~~A thermo-optical modulator comprising a plurality of micro-mechanical thermal structures ~~as claimed in claim 1~~ ordered on a substrate, each micro-mechanical thermal structure comprising two layers of material with different thermal expansion coefficients in a first direction and a second direction respectively, the first direction being transverse to the second direction and the two layers comprising an oriented polymer, wherein the director of the molecules of the oriented polymer of the first layer is transverse to the director of the molecules of the oriented polymer of the second layer.

7. (Currently Amended) ~~Thermo-optical modulator~~ The thermo-optical modulator ~~as claimed in~~of claim 6 wherein the ~~layers~~ micro-mechanical thermal structures are each provided with a reflective coating on exterior surfaces thereof ~~or an absorbing coating~~.

8. (Original) Thermo-optical modulator as claimed in claim 6 wherein the oriented polymer layers comprise a dichroic guest-host dye for absorbing light.

9-11. (Canceled)

12. (New) The micro-mechanical thermal structure of claim 1, wherein the two layers are made of a same liquid crystalline polymerized material as each other.

13. (New) The micro-mechanical thermal structure of claim 1, wherein at least one of the two layers comprising at least one of C6H and C10H.

14. (New) The micro-mechanical thermal structure of claim 1, wherein each of the two layers comprises one of C6H and C10H.

15. (New) The micro-mechanical thermal structure of claim 1, further comprising a reflective material coated on an exterior surface thereof.

16. (New) The micro-mechanical thermal structure of claim 1, further comprising an absorbing material coated on an exterior surface thereof.

17. (New) The micro-mechanical thermal structure of claim 16, wherein the absorbing material is CrO2.

18. (New) The thermo-optical modulator of claim 6, wherein the micro-mechanical thermal structures are each provided with an absorbing coating on exterior surfaces thereof.

19. (New) The thermo-optical modulator of claim 6, wherein each of the structures has a first proximal end the substrate and a second distal end, wherein each of the structures extends perpendicularly to the substrate from the proximal end to the distal end when the structure is at a first, lower temperature, and such that each structure is deformed to bend from the proximal end to the distal end when the structure is at a second temperature greater than the first temperature.

20. (New) The thermo-optical modulator of claim 19, wherein the first and second layers comprise a polymer having a glass transition temperature, and wherein the first temperature is below the glass transition temperature, and the second temperature is above the glass transition temperature.

21. (New) The thermo-optical modulator of claim 6, wherein the each of the structures has a thickness in a direction parallel to the substrate, and wherein the height of each structure is at least 5 times the thickness.